7.0 PRESERVE MANAGEMENT AND MONITORING

Management of the Preserve is an important element in its success, and to the overall success of the Subregional MSCP program. The overarching MSCP Subregional Plan goal is to maintain and enhance biological diversity in the region and conserve viable populations of Covered Species and their habitats, while enabling continued economic growth for the region.

7.1 Management Goals and Objectives

The overall management goal of the MSCP Subregional Plan and this Subarea Plan is to ensure that the biological values of natural resources, where land is preserved as part of the MSCP through acquisition, regulation, mitigation or other means, are maintained over time.

The City will be responsible for the maintenance and management of Preserve land owned in fee title by the City. Lands in the Preserve which are set aside as open space through the development process but are not dedicated in fee title to, and accepted by the City, will be managed by the landowner or a third-party managing entity under the control of the City. Within the Otay Ranch Planning Component, Preserve land will be maintained and managed by the Otay Ranch Preserve/Owner Manager (POM). Finally, Federal and State agencies will maintain, manage and monitor their present land holdings as well as those in which they acquire a legal interest.

Land located in the Preserve will be managed and maintained in accordance with specific management objectives as follows:

1. To ensure the long-term viability and sustainability of native ecosystem function and natural processes throughout the Preserve.

2. To protect existing and restored biological resources from intense or disturbing activities within the Preserve while accommodating compatible uses.

3. To enhance and restore, where feasible, appropriate native plant associations and wildlife connections to adjoining habitat in order to provide viable wildlife and sensitive species habitat.

4. To facilitate monitoring of selected target species, habitats, and linkages in order to ensure long-term persistence of viable populations of priority plant and animal species and to ensure functional habitats and linkages for those species.

7.2 Plan Implementation Overview

Implementation of the Subarea Plan will include two major elements: preparation of area-specific management directives (ASMDs) discussed in Section 7.3 and long-term Preserve management discussed in Section 7.4. While this Subarea Plan provides a general roadmap for Preserve management, the ASMDs discussed in Section 7.3 will detail the management tasks and approaches to adaptive management best applied to individual areas of the Preserve.

Each area of the Chula Vista Preserve is unique in terms of existing conditions, Preserve configuration, ownership of land, the existence and location of sensitive species, and management needs. For ease of management, the Preserve will be divided into three distinct Preserve Management Areas (PMAs). ASMDs will be used to guide long-term management in each PMA shown on Figure 7-1 and described below: Central City PMA, North City PMA and Otay Ranch PMA.

7.2.1 Central City Preserve Management Area

The Central City PMA encompasses the Preserve areas surrounded by the existing communities of Bonita Long Canyon, Rancho Del Rey, Terra Nova, Sunbow and EastLake. The Central City PMA will also include approximately 268 acres within the Otay River Valley, located west of Heritage Road and not in the Otay Ranch. The Central City Preserve areas total an estimated 1,586 acres and include primarily coastal sage scrub, and small areas of riparian vegetation and grassland habitats. The conserved canyons and hillsides in the Central City PMA contain a variety of coastal sage scrub, plant and animal species including San Diego barrel cactus, snake cholla, San Diego ambrosia, coastal California gnatcatcher, and coastal cactus wren. Isolated areas of Otay tarplant exist as well. The Central City PMA also includes any Preserve areas along the bayfront.

7.2.2 North City Preserve Management Area

The North City PMA includes the Preserve areas that will become part of the new communities of Rolling Hills Ranch and Bella Lago. These Preserve areas total approximately 303 acres and include primarily coastal sage scrub, native and non-native grassland and riparian scrub. Variegated dudleya, Otay tarplant and the QCB are also found in the North City PMA. An additional 362 acres in this northeastern area of the City are included in the San Diego NWR, and are managed by USFWS. These lands include approximately 186 acres of San Miguel Ranch, including critical areas rich in Otay tarplant, and approximately 176 acres of the Inverted "L" property.

7.2.3 Otay Ranch Preserve Management Area

The Otay Ranch PMA encompasses all Preserve areas of the Otay Ranch Planning Component within the City, including the Otay River Valley, Salt Creek and Wolf Canyon. These Preserve areas total approximately 2,742 acres. Upland habitats found within this Preserve area include coastal sage scrub, maritime succulent scrub, chamise chaparral and non-native grassland. Wetland habitats include southern willow scrub, Baccharis scrub, Baccharis flooplain scrub and tamarisk scrub. Sensitive plant and animal species to be protected in the Otay Ranch PMA include coastal California gnatcatcher, coastal cactus wren, Cooper's hawk, golden eagle, grasshopper sparrow, least Bell's vireo, orange-throated whiptail, southern California rufous-crowned sparrow, Otay tarplant, San Diego barrel cactus, snake cholla, and variegated dudleya.

7.3 Framework Management Plans and Area-Specific Management Directives (ASMDs)

The MSCP Subregional Plan indicates that each subarea plan will provide specific management guidelines to ensure preserved lands are managed for the long-term conservation of biological resources. Each Take Authorization holder is required to prepare a Framework Management Plan "to provide general direction for all Preserve management issues within the subarea plan." Subsequently, "area-specific management directives must be developed in accordance with the framework plan to address management issues at the site-specific level."

Framework Management Plans for all three PMAs have been completed, and are incorporated into this Subarea Plan. The Framework Management Plan for the Central and North City PMAs, the City Planning Component Framework Management Plan, is incorporated into this Subarea Plan as Section 7.5. The Framework Management Plan for the Otay Ranch PMA is embodied in the Otay Ranch RMP, which is summarized in Section 7.6 and incorporated in its entirety by reference into this Subarea Plan (Appendices C, D and E). Additional Framework Management priorities for the Otay River Valley Park and recreational uses are also incorporated into this Subarea Plan as Section 7.6.3.

The City Framework Management Plan and Otay Ranch Framework Management Plan provide general guidelines and standards for the management of the Preserve. The Framework Management Plans outline principal Preserve maintenance activities and requirements, provide specifications to limit "edge effects" and impacts from adjacent development, furnish a framework to address potential impacts to the Preserve from invasive, exotic species, and create a blueprint for managing public access, trails and recreational uses within the Preserve.

In addition to general guidelines and standards, both the City Planning Component Framework Management Plan and the Otay Ranch Framework Management Plan (RMP) contain certain specific management requirements. Section 7.5.6 of the City Planning Component Framework Management Plan details project-specific requirements related to Covered Projects within the Subarea's City Planning Component. Project-specific requirements include requirements for revegetation, surveys and monitoring, fencing or berming, prohibitions on drainage, and/or restrictions on grading or lighting that may impact the Preserve. Specific management requirements contained in the Otay Ranch Framework Management Plan are found in the RMP2 plans and programs. Based upon several studies specific to Otay Ranch, the RMP plans and programs (discussed in Section 7.6.1) provide specific guidelines and requirements for Vernal Pool management, biota monitoring, and management, and phasing-out of grazing activities within the Preserve.

The Framework Management Plans establish two levels of management activities for the Preserve (Priority 1 and Priority 2). The following summarizes the principles used to develop the recommendations for Preserve management priority levels.

Priority 1: Measures for managing and maintaining biological resources within the Preserve, including management tasks that are necessary to ensure that the Covered Species are adequately protected. These management directives will be funded through financing mechanisms created

by the City or through project financing pursuant to Section 8.0 and carried out by the City or Appropriate Managing Entity. These management directives will be included in each ASMD, which will be developed for each project prior to issuance of a grading permit

Priority 2: These measures are not required for Covered Species status; rather, they are recommendations for enhancing the quality and function of the Preserve, including public education and provision of barriers (vegetation, rocks/boulders and/or fencing) to direct public access. In future communities, development of educational materials will be required to be developed as part of SPA or Precise Plan conditions, to provide information to and heighten the awareness of new residents who will be living adjacent to the Preserve. Where provision of barriers is required to meet specific species management goals detailed in Table 3-5 of the MSCP Subregional Plan, installation of such barriers will become a condition of the related project SPA or Precise Plan and area-specific management directives and will be a Priority 1. Although Priority 2 directives will be incorporated into area-specific management directives to the extent feasible, it is recognized that many of these directives cannot be implemented immediately on approval of this Subarea Plan but will instead occur over the life of this Subarea Plan as funding sources become available.

Annexation of land into the City will affect the planning components in one of two ways. Annexation of land from the Bonita Planning Component will become part of the City Planning Component of this Subarea Plan and will be subject to the City Planning Component Framework Management Plan. Annexation of land from the Otay Ranch Planning Component will remain within that component and will be subject to the provisions of the Otay Ranch Planning Component Framework Management Plan described in Section 7.6.

7.3.1 Special Studies

In addition to the Framework Management Plans, "baseline" biological information for each PMA is being developed to incorporate into ASMDs. The City is undertaking two special studies for this purpose, one for the Central City and one for the Otay Ranch PMA. Biological baseline assessments for the North City PMA have been or will be conducted as part of project approvals for the Rolling Hills Ranch and Bella Lago projects.

The baseline biological information developed through the special studies will be used to better define the locations and biological values of resources found within the Central City and Otay Ranch PMAs. The primary goal of the studies will be to identify specific biological resources appropriate for management focus and to define "functional biological management unit(s)" for each PMA.

Grants have been obtained from the State of California Natural Community Conservation Planing grant program to fund the Central City study as well as preparation of area-specific management directives for the Central City PMA. Preparation of this study will require that the City actually undertake biological surveys for this PMA. The City anticipates that the Central City surveys will pay particular attention to potential locations for Narrow Endemic Species, and specifically Otay tarplant. Thus, future ASMDs for the

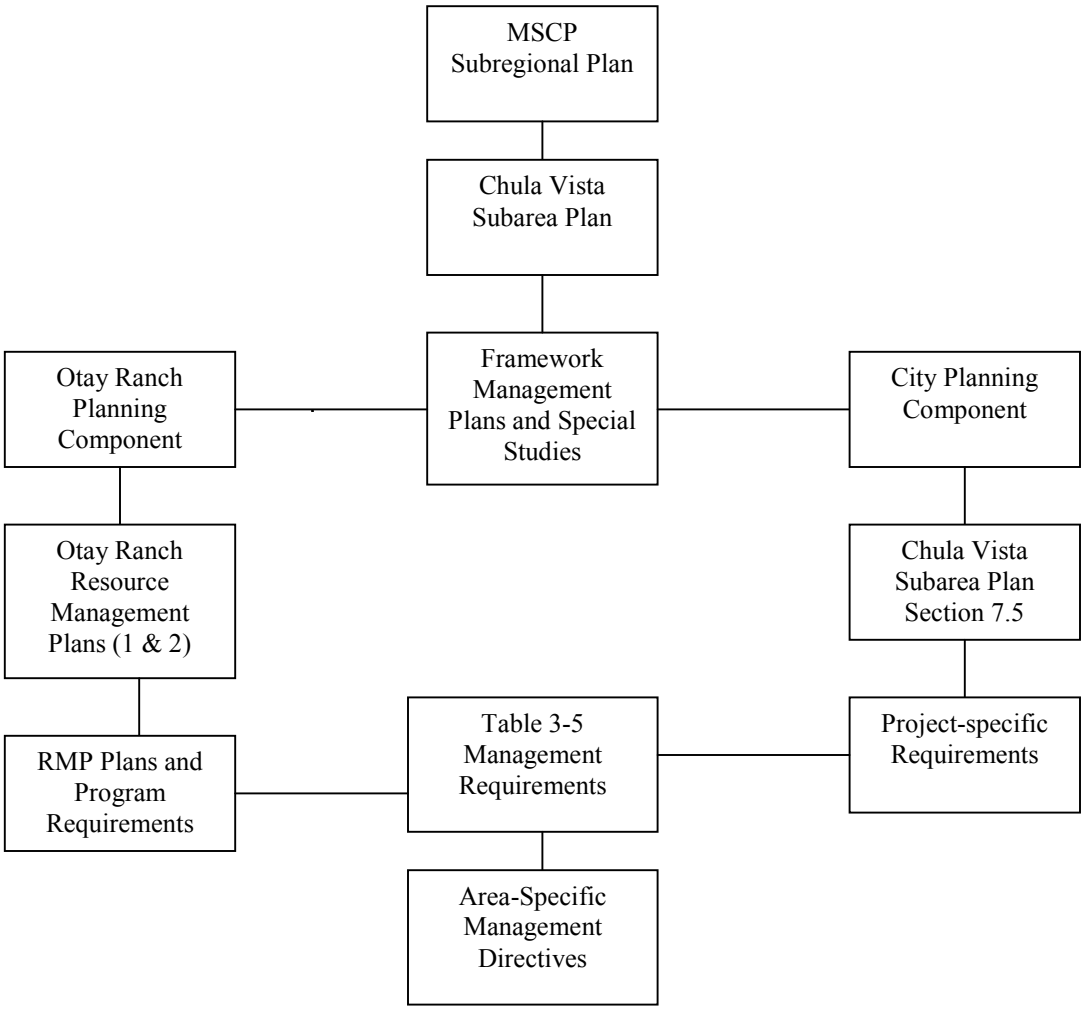
Central City may focus on developing management goals and activities to ensure survival of these important narrow endemic plant species.

Because of the richness of resources located within the Otay River Valley and the importance of the Otay Ranch PMA to the overall Preserve, the City has also initiated a special study of the Otay River Valley, including the Salt Creek and Wolf Canyons. Biological surveys will not be required to complete the Otay River Valley study, because data are available from surveys conducted for preparation of the Otay Ranch RMP. In addition to defining functional management units for future ASMDs, this special study will help to identify existing or expected (i.e., after restoration) functions for specific sites (e.g., breeding area for birds, linkages for mammals and herpetofauna, buffers to development, seed bank for rare plants). Another goal of this study will be to identify potential areas for future habitat restoration, enhancement and/or re-creation.

7.3.2 Area-specific Management Directives (ASMDs)

The Framework Management Plans and information developed through Special Studies will be incorporated into area-specific management directives, or ASMDs. ASMDs will incorporate the guidelines and specific management requirements from the appropriate Framework Management Plan, project-specific requirements for Covered Projects or requirements of the Otay Ranch RMP plans and programs, management requirements of Table 3-5 of the MSCP Subregional Plan and information and recommendations from relevant special studies. Guidelines and requirements from these documents will be evaluated in relationship to the Preserve configuration and specific habitats and species found within each ASMD study area, and incorporated into the ASMDs as applicable.

The following flowchart illustrates how the Framework Management Plans and Table 3-5 of the MSCP Subregional Plan lead to development of area-specific management directives.



7.3.3 Emergency Management

Existing regulations are in place within the Subarea which have been developed and implemented in order to limit unanticipated and unforeseen accidents, in and around the Preserve. Under the California Health and Safety Code, all businesses that store and/or generate reportable quantities of hazardous materials are required by the California State Health and Safety Code to submit a business plan to the Hazardous Management Materials Division (HMMD) of the County Department of Environmental Health. Business plans, updated every three years, are required to include an inventory of hazardous materials stored on site, an emergency response plan, and information related

to employee training. The HMMD conducts routine inspections at businesses required to submit business plans. The purpose of these inspections is to:

- Ensure compliance with existing laws and regulations concerning business plan requirements.
- Identify existing safety hazards that could cause or contribute to an accidental spill or release.
- Suggest preventative measures designed to minimize the risk of a spill or release of hazardous materials.

Responses to all hazardous materials emergencies within the County of San Diego and all of its incorporated cities is provided through the joint efforts of the San Diego Fire Department (SDFD) HAZMAT Response Team and the San Diego County Department of Health Services Hazardous Materials Management Division (HMMD). The combined team is referred to as the Hazardous Materials Incident Response Team (HIRT). HIRT is a program of the San Diego County Unified Disaster Council, which is the governing body of the Unified San Diego County Emergency Services Organization. The regional HIRT response program was established through a Joint Powers Agreement signed by the County of San Diego and all incorporated cities within the County, and is funded by participating JPA members, including the City of Chula Vista.

When responding to a toxic spill, SDFD is assigned responsibility to isolate and contain the incident, stop the release of potentially hazardous materials and effect rescues. HMMD is responsible to assess the risk to public health and safety and to determine potential environmental impacts. In this role, the HMMD responsibilities include determination of the need for evacuations; arrangements necessary for protective measures; assessment of need for and extent of clean-up of contaminated soil, water and/or vegetation; determining adequacy of clean-up; and implementing other enforcement measures as required.

In addition to State HMD requirements and HIRT incident responses, all new development within the City, including industrial and commercial uses, is subject to NPDES standards that require containment of urban runoff and potential toxic spills within development areas. Pollution Prevention and Best Management Practices (BMPs) are required to be implemented, as feasible. Some of the storm water management goals relevant to spills shall include but not be limited to the following:

- Conserve natural areas where feasible;
- Minimize storm water pollutants of concern from urban runoff;
- Remove pollutants of concern from urban runoff;
- Include additional storm water management quality provisions applicable to individual emergency incident.

In addition to the above existing programs and procedures, an Emergency Management Plan (EMP) will be prepared by the City to establish protocols for responding to emergencies in and/or immediately adjacent to the Preserve. New EMP protocols will

establish immediate actions to be taken to ensure that emergencies are handled in a manner consistent with the needs of wildlife protection, while allowing the City to meet its primary responsibility to ensure public health and safety.

The EMP will incorporate the following:

- Identification of procedures that the City may be able to implement prior to, during and after any emergency event in the Preserve; and

- Provision for implementation of a triage system that, when feasible, includes notification to the Wildlife Agencies as soon as feasible after the onset of an emergency that affects the Preserve; and

- Design of an emergency notification and response system that will strive to protect the Covered Species and the Preserve to the extent that it is possible to do so and remain consistent with the primary goal of responding to and containing catastrophic events and preventing harm to the public health, safety and welfare; and

- Provisions for restricting access to the Preserve, or portions of the Preserve when appropriate and necessary to protect Covered Species and habitat in the event of an emergency event; and

- Establishment of protocols to insure that Best Management Practices are applied during clean-up activity within the Preserve subsequent to emergency events. Whenever feasible and appropriate, a qualified biologist will be present during clean-up activities required within the Preserve subsequent to any emergency. The biologist will be tasked by the City Habitat Manager to coordinate with the responsible local agency to insure that clean-up activities are completed in a manner that minimizes impacts to Covered Species to the extent feasible; and

- Incorporation of relevant portions of the contingency spill plan notebook published by the USFWS, and any pertinent recommendations issued by CDFG's Office of Spill Prevention and Response to the extent feasible and consistent with the requirements and operating guidelines of the San Diego County Hazardous Materials Incident Advisory Team (HIRT) and City regulations; and

- Establishment of protocols to insure that the Planned Responses associated with a Changed Circumstance, as defined and described in Section 5.8 of this Subarea Plan, are implemented; and

- Establishment of an advisory committee, the Habitat Emergency Advisory Team (HEAT). Protocols will be established to provide that the HEAT will be activated by the City Habitat Manager at the onset of any Repetitive Fire as defined by Section 5.8 of this Subarea Plan. The HEAT may also, at the discretion of the City Habitat Manager, be activated at the time of or subsequent to any other emergency event and/or Changed Circumstance that may affect the Preserve. The HEAT will consist

of the City Habitat Manager, one or more qualified biologists selected by the City Habitat Manager who is knowledgeable about the species and/or habitats of concern, and a qualified biologist from USFWS and from CDFG. The HEAT will serve as an advisory committee and will make recommendations to the City regarding actions that should be undertaken to protect those areas of the Preserve affected by the emergency event, including during and after such event.

7.3.4 Preserve Management Studies Schedule

Because City fiscal resources are limited, not all preserve management studies and plans can be completed simultaneously. Table 7-1 provides a schedule for the completion of Special Studies, ASMDs and the City EMP.

Table 7-1: Implementation and Preserve Management Studies Schedule

Task	Trigger	Estimated Time to Complete Task
Development and adoption of Subarea Plan Implementation Tools (General Plan Amendment, Amendments to Excavation, Grading and Fills Ordinance, HLIT Ordinance, Otay Ranch Grazing Ordinance)	Adoption by City of Subarea Plan	Concurrent with Adoption of Subarea Plan
Participation in Otay River Valley Wetlands functions and values study, special training in cooperation with the U.S. EPA for City staff on Federal wetland permitting	Adoption by City of Subarea Plan	Undetermined
Completion of Otay Ranch PMA / Otay River Valley baseline biological study	Issuance of 10(a)(1)(B) permit to City from USFWS	4 – 6 months
Baseline biological study for Central City PMA	Execution of Agreement between State and City for NCCP Grant Award	12 – 18 months
Central City PMA area-specific management directives	Completion of baseline biological study for Central City PMA	12 – 24 months
Area-specific management directives for North City and Otay Ranch PMAs	Triggered by individual development projects	Will vary
Emergency Management Plan	Adoption of Subarea Plan	12-18 months

7.4 Preserve Management Overview

The City will designate a City Habitat Manager to oversee preparation of ASMDs and accomplish the long-term Preserve management activities as determined by the ASMDs. The City Habitat Manager will be tasked to accomplish the day-to-day operations associated with managing the Preserve and will be authorized to make decisions related to allocation of Preserve management program funding. Although the management structure for each of the PMAs may differ, the City Habitat Manager will be responsible for coordinating Preserve management activities within each PMA, and will oversee the City's Quino Habitat Restoration Program. The City Habitat Manager will determine Preserve management program priorities, and will be responsible for the allocation of the Biological Enhancement Program and the Preserve Management Endowment Funds discussed in Section 8.0. In addition, in the Otay Ranch PMA, the City Habitat Manager will represent the City on the Otay Ranch Preserve Owner/Manager project team. Finally, the City Habitat Manager will coordinate Planned Responses to Changed Circumstances in the Preserve, should they occur.

The City Habitat Manager will work with four advisory committees. The Habitat Management Technical Advisory Committee, established since approval of the MSCP Subregional Plan, will provide input on Preserve management issues, including adaptive management measures related to invasion of exotic species. An Otay River Valley/Salt Creek Stakeholders Committee, discussed in Section 7.4.7, will be established to provide input on Preserve management decisions that affect the Otay Ranch PMA. A Quino Scientific Advisory Committee (QSAC), described in Section 4.4.3.4, will be created to assist the City Habitat Manager in determining priority tasks for the Quino restoration program. Finally, a HEAT (Habitat Emergency Advisory Team), described in Section 7.3.3 will be formed to provide input in the case of Changed Circumstances and/or other emergencies as determined by the City Habitat Manager.

With advice from the advisory committees, the City Habitat Manager will supervise the ongoing accomplishment of four management elements: short-term management, long-term maintenance and management, long-term biological monitoring, and brush management. The following Sections 7.4.1 to 7.4.4 discuss the four management elements in the general context of this Subarea Plan. Sections 7.4.5 to 7.4.7 provide additional detail relative to management of each of the three individual PMAs.

7.4.1 Short-term Management

In the North City and Otay Ranch PMAs, short-term management involves restoration and/or maintenance required to be completed as part of conditions of development project entitlement approvals. Short-term management is undertaken during the period of time when designated Preserve areas are owned by private landowners, subsequent to City approval of development entitlements and prior to dedication of such land into the Preserve. These tasks may include restoration of habitat and/or requirements to ensure retention of habitat values on land that will be dedicated into the Preserve as a condition of entitlement.

The short-term management program provides management necessary to ensure the establishment of project-specific restoration and will also ensure the maintenance of habitat values associated with onsite conservation areas during the early phase of the Preserve management program. Accomplishing short-term management tasks is the responsibility of the project developer. The tasks are specified by each project Mitigation Monitoring and Reporting Program (MMRP) and the project Conditions of Coverage found in Section 7.5.6 of this Plan. Compliance with all short-term management requirements will be ensured prior to project grading. MMRP requirements are included as conditions on final maps. Subarea Plan Conditions of Coverage will be incorporated into conditions for clearing, grubbing and/or grading permits. When applicable, map and/or grading permit conditions will include requirements to post bonds and other financial assurances to ensure compliance.

Natural open space in the Central City PMA is currently protected through existing zoning and land use designations. Prior to completion of the ASMDs for existing City-owned open space lands in the Central City PMA, the City will continue to maintain these natural open space areas. Maintenance during this interim period will be consistent with City Open Space District maintenance standards for non-irrigated natural and/or native vegetation (Code 5) or for non-irrigated revegetated open space (Code 4) as described in the City's existing Open Space District contract specifications. Funding for this continued maintenance is provided through existing finance districts, discussed in Section 8.0 of this Subarea Plan.

7.4.2 Long-term Maintenance and Management

Long-term maintenance and management involves implementation of the Framework Management Plans and ASMDs discussed in Section 7.3 of this Subarea Plan. Long-term maintenance and management begins when property is conveyed into the Preserve, and is funded through financing mechanisms intended to provide maintenance and management in perpetuity (Section 8.0). Generally, maintenance and management may be broken into the following generic tasks:

1. Preserve Maintenance

    - Removal of trash, trimmings, debris and other solid waste
    - Maintenance of trails and fences
    - Implementation of security programs to enforce "no trespassing" rules and curtail activities that degrade resources, such as grazing, shooting, illegal planting, illegal dumping, off-road traffic, and enforcement of leash laws

2. Preserve Management

    - Implementation of programs to maintain and/or improve, operate and manage Preserve habitat values through removal and control of exotic plant species (weeds), treatment of disease or injury, and/or habitat restoration
    - Remediation necessary due to Changed Circumstances

The scope and complexity of the long-term maintenance and management tasks will be determined individually for each PMA by the applicable Framework Management Plan and relevant special studies, and by specific ASMD requirements. Preserve management also will include the QCB habitat restoration/enhancement activities described in Section 4.4.2.4 of this Subarea Plan. If any portion of the Preserve becomes part of the NWR and/or a State-owned Preserve, funding and implementation of all management will be the responsibility of the USFWS and/or the CDFG.

7.4.3 Long-term Biological Monitoring

Biological monitoring within the Subarea will be the responsibility of the City, although biological monitoring within the Otay Ranch PMA will be assumed by the POM or its designee, and the City may assign a designee to conduct monitoring within the Central City and/or North City PMAs. Both the City Planning Component Framework Management Plans and Otay Ranch RMP include provisions for monitoring sensitive biological resources, to ensure proper adaptive management. Biological monitoring will be accomplished in accordance with the City Planning Component Framework Management Plan or the Otay Ranch RMP and consistent with the MSCP Subregional Plan. If any portion of the Preserve becomes part of NWR and/or a State Owned Preserve, funding and implementation of all monitoring will be the responsibility of the USFWS and/or the CDFG.

Monitoring activity will begin as land is conveyed into the Preserve. The City may require applicants for land development permits to provide a map and description of existing conditions. Proper management of the Preserve will require ongoing analysis of the data collected through monitoring activities. Although field data may be collected by local agency Preserve managers, the Wildlife Agencies will assume primary responsibility for coordinating the monitoring programs, analyzing data, and providing information and technical assistance to the jurisdictions to ensure uniformity in the gathering and treatment of this data throughout the MSCP Subregion. Pursuant to the MSCP Subregional Plan, no additional fees will be charged to landowners for biological monitoring, although project developers will be required to assume responsibility for all activities incorporated into this Subarea Plan as project-specific conditions for coverage.

Consistent with the USFWS Five-Point Policy (65 F.R. 35242), Chula Vista will provide information necessary to assess habitat impacts and conservation, and verify progress toward the stated biological goals and objectives by preparing and submitting to the Wildlife Agencies an annual report. The report will summarize ongoing monitoring activities and will include an update of total habitat area lost and habitat area conserved within the *Chula Vista Subarea* by vegetation type. The report will also include a status report on the QCB restoration and monitoring programs described in Sections 4.4.3.4 and 7.4.3.2 of this Subarea Plan.

7.4.3.1 Otay Ranch Biota Monitoring Program

Many of the monitoring and management requirements found in Table 3-5 of the MSCP Subregional Plan (Appendix A) reflect requirements established by the plans and programs of the Otay Ranch RMP. Among the plans and programs prepared for Otay Ranch, the Biota Monitoring Program ensures continued biological monitoring of the many different sensitive habitats, plants, and wildlife species to be found in these areas of the Preserve. The Biota Monitoring Program for the Otay Ranch is funded through CFD levies on new homes built in Otay Ranch within the City; however, the monitoring program will be implemented by the POM throughout the Otay Ranch Preserve.

The purpose of the Otay Ranch Biota Monitoring Program is to provide the POM with guidelines and direction for implementing the monitoring program. The adopted program plan identifies specific monitoring techniques, providing monitoring guidance for each sensitive habitat type, for wildlife corridors, and for steep slopes. Timing and milestones for monitoring activities are also outlined in the plan. The Biota Monitoring Program requires tailored monitoring strategies for different resources. Monitoring will provide the data base from which to draw comparisons and to determine negative or positive changes in the biological resources of an area, including vegetation community composition, overall health and vigor of the biological resources, species richness, diversity, demographic structure of populations.

Monitoring techniques included in the Otay Ranch Biota Monitoring Program include the following:

1. Regularly updated aerial photographs to help detect large-scale changes in the biological resources.

2. Establishment of permanent photo-documentation stations in study plots to detect more fine-grained changes in vegetation communities and composition.

3. Field forms that are the same from survey to survey and consistently utilized by personnel.

4. Consistent field techniques for measuring biological resources.

5. Measurement of important environmental variables, as determined by the POM.

The Biota Monitoring Program establishes performance standards and a monitoring methodology for both existing vegetation and restoration sites for the following habitats in Otay Ranch:

- Diegan Coastal Sage Scrub/Maritime Succulent Scrub

- Floodplain Scrub, Southern Willow Scrub & Aquatic/Freshwater Marsh
- Valley Needlegrass Grassland/Perennial Grassland
- Alkali Meadow
- Woodlands
- Vernal Pools

In addition, the Program details monitoring methodologies for associated plant and wildlife species and wildlife corridors.

7.4.3.2 QCB Monitoring Program

The USFWS 2001 QCB Recovery Plan calls for monitoring to help to define adaptive management strategies for the QCB. The City proposes to implement this objective through a three-pronged effort:

1. Monitoring of overall habitat quality in the Preserve (as described above);

2. Monitoring effectiveness of QCB habitat enhancement/restoration efforts; and

3. Limited census monitoring of QCB populations.

As noted above, the Otay Ranch Biota Monitoring Program establishes performance standards and a monitoring methodology for both existing vegetation and restoration sites for a number of habitat types. The City proposes to use this monitoring program as a basis upon which to establish monitoring activities specifically directed at QCB habitat. A qualified restoration biologist, selected by the City Habitat Manager, will establish a baseline percentage of exotic weed species in QCB habitat restoration/enhancement areas through surveys. Locations of invasive non-native plant species will be mapped and scheduled for removal, monitoring or control as necessary. These areas will then be monitored for the occurrence of exotic invasive plants before and after enhancement to determine the effort's level of success. An adaptive management program will be implemented based on the results of the monitoring program.

In addition to monitoring the effectiveness of QCB habitat restoration efforts, the City will conduct limited annual census monitoring. Census monitoring for the QCB will have the primary goal of assessing the QCB population within the context of the QCB population throughout southern San Diego County. The methodology for census monitoring will be phased dependent upon the number of QCB occurring within the City.

Because there are a limited number of QCB locations currently known from the City, and because access is not available for Preserve lands until such lands are conveyed, initial monitoring efforts will consist of surveying on such conveyed lands that include all known QCB locations, all known suitable but currently unoccupied habitat, and all sites on which QCB restoration activities have been

initiated. This survey will be conducted during the second or third week of the QCB flight season to maximize the potential for detection, and will be conducted only during optimal weather conditions. The biologist conducting the surveys shall have a valid permit from the USFWS for conducting QCB surveys. This census methodology will be conducted until the observed QCB population in the City reaches 25 individuals for two consecutive years.

The data collected will be compared with population trends for the QCB in southern San Diego County. For example, if 100 QCB are observed in southern San Diego County in 2002 and 100 QCB are observed in 2003, the baseline against which the City's census data is compared does not change. If, however, the number of observed QCB increased to 200 individuals, the City's baseline would change from eight to 16 individuals. Because of the limited number of currently known QCB locations in the City, and the high variability typically found in its population numbers, interpretation of the results of these surveys will need to be broad in nature, especially during poor flight years for the QCB. Population estimates within 50% of the baseline (established as described above) will be considered acceptable variations in the City QCB population. For example, if all eight QCB locations were surveyed in 2003 and only four QCB were observed, and the baseline surveys for 2003 in southern San Diego County were no different than the previous year, then the City QCB population would be considered to be within acceptable variability limits. If, however, the baseline in southern San Diego County doubled from the previous year, then the City QCB population would not be meeting the 50% criterion (eight sightings would meet the 50% criterion). If the criterion is not met for two consecutive years, the City would meet with the QSAC to determine appropriate adaptive management measures to address the apparent decline.

Once the QCB population in the City reaches 25 individuals, a more intensive censusing effort will be conducted at the two locations within the City with the highest QCB densities (based on surveys from previous years). It is anticipated that these areas will be censused four times annually during the flight season using census techniques developed by the QCB Recovery Team. Similar to the program described above, these data will be compared with other population trend data within southern San Diego County to determine if the 50% criterion is being met. If the criterion is not met for two consecutive years, the City would meet with the QSAC to determine appropriate adaptive management measures to address the apparent decline.

The City will fund these efforts within the funding allocated for its MSCP Preserve management and habitat enhancement/restoration program, as discussed in Section 8.0 of this Subarea Plan. Although local agency Preserve managers will collect field data, the Wildlife Agencies will assume primary responsibility for coordinating QCB monitoring programs, analyzing data and providing information and technical assistance to the jurisdictions throughout the MSCP Subregion.

7.4.4 Brush Management

Brush management is required to be undertaken in the City in areas where urban development interfaces with open space, in order to reduce fire fuel loads and reduce potential fire hazard. The City recognizes three brush management "Zones," requiring different levels of brush management/fuel reduction activity. The three brush management Zones are described below:

- Zone 1 is the area closest to the structure. In this Zone, the fuel load (vegetation) adjacent to all structures on the property must be reduced to a minimum of 18 inches in height and irrigated. Zone 1 brush management is implemented in an area at least 30 feet from existing structures as required by the Fire Marshal in the following communities: Bonita Long Canyon, Rancho Del Rey, Terra Nova, and EastLake I and II. In all new communities, including EastLake III, Bella Lago, San Miguel Ranch and Otay Ranch, Zone 1 brush management will be required to extend 50 feet from structures. The communities of Rolling Hills Ranch and Sunbow II will conduct brush management according to the requirements of their respective approved SPA or Precise Plans.

- Zone 2 extends 50 feet beyond Zone 1, and requires that vegetation be limited to a height of two to four feet, depending upon conditions. The critical brush management activity in Zone 2 is the clearing of dead underbrush. Zone 2 brush management is accomplished through hand-clearing.

- Zone 3 may extend up to 50 feet beyond Zone 2, at the discretion of the Fire Marshal. In this Zone, brush management is undertaken only if severe fire hazards exist. When necessary, clearing of dead underbrush and thinning of canopies created by tall plants or trees is accomplished by hand. To the extent practicable, non-emergency brush management in zone 3 will be undertaken outside the bird breeding seasons (April 1 through June 31) in areas where breeding and/or nesting may occur.

Generally, all brush management activity is undertaken outside the Preserve. Exceptions to this may apply only in existing communities in the Central City PMA and/or North City PMA. Sections 7.4.5.1, 7.4.6.1 and 7.4.7.1 provide detailed information relative to how brush management is or will be conducted for each community within the three PMAs.

7.4.4.1 Urban-Wildland Interface Code

The City adopted the 1997 Urban-Wildland Interface Code as Section 15.38 of the Chula Vista Municipal Code, and it became effective on July 1, 1999. The purpose of the code is to lessen the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to prevent structure fires from spreading to wildland fuels. Two key elements of the Urban-Wildland Interface Code as it relates to the Chula Vista MSCP Subarea

Plan are the special building construction regulations and the fuel modification provisions.

7.4.4.2 Wildland/Urban Interface: Fuel Modification Standards

The plant list contained in the "Wildland / Urban Interface: Fuel Modification Standards," dated November 1995, (Appendix K) must be reviewed and utilized to the maximum extent practicable when developing landscaping plans in areas adjacent to the Preserve.

7.4.4.3 Emergency Brush Management

In the event that the City Fire Marshal determines an emergency situation exists, minimal additional brush management may be undertaken under the direction of the Fire Marshal. In such an emergency situation, the Fire Marshal will adhere to the Memorandum of Understanding between the Wildlife Agencies, California Department of Forestry, the San Diego County Fire Chief's Association, and the Fire District's Association of San Diego County dated February 26, 1997 (Appendix L).

7.4.5 Central City PMA Management

The Central City PMA Preserve lands are already dedicated to the City and are surrounded by existing urban development. The City Planning Component Framework Management Plan, incorporated as Section 7.5 of this Subarea Plan serves as the Framework Management Plan for the Central City PMA. ASMDs for the Central City will incorporate the requirements of the City Planning Component Framework Plan, as well as the requirements incorporated into Table 3-5 of the MSCP Subregional Plan.

ASMDs for this PMA will be developed by the City, in accordance with the timeline presented on Table 7-1 in Section 7.3.4 of this Subarea Plan. Prior to preparing ASMDs for the Central City, the City will conduct surveys to establish baseline biological information about the habitats and species prevalent in these urban open space areas. The City has received grant awards from the CDFG NCCP local assistance grant funds to be used specifically to conduct a baseline biological study for the Central City PMA and prepare area-specific management directives for the Central City.

Lands within the Central City PMA are currently being managed by the City Parks and Recreation Department. Management tasks currently funded and undertaken include Priority I general maintenance tasks, including:

- Removal of trash, debris and other solid waste
- Maintenance of trails and fences
- Implementation of security programs to enforce "no trespassing" rules, curtail illegal activities and activities that may degrade resources, such as grazing, shooting, illegal planting, dumping and off-road vehicle traffic
- Limited weeding along Preserve/urban interfaces

Subsequent to adoption of the Subarea Plan and issuance of Take Authorization to the City from the Wildlife Agencies, the City Habitat Manager will be assigned to coordinate with the City Parks and Recreation Department and to expand Preserve management activities within the Central City PMA. As discussed in Section 8.3.1.1, a new Central City Preserve Biological Enhancement Funding Program will be established, providing funds for enhanced management within the Central City PMA. Working with a qualified biologist selected by the City, the City Habitat Manager will determine the priorities for enhanced management and long-term monitoring in the Central City PMA based upon ASMDs and will assume responsibility for allocation of the Biological Enhancement Funds.

7.4.5.1 Brush Management in the Central City PMA

Brush management for the communities of Bonita Long Canyon, Rancho Del Rey, Terra Nova, and EastLake I and II is funded by Open Space Districts or Landscape Lighting and Maintenance Districts, and the work is contracted by the City. In these communities, Zone 1 brush management extends 30 feet beyond any structure, as required by the Fire Marshal. In addition, if a property-line is located more than 30 feet from the structure, five to 10 feet of Zone 1 brush management is undertaken outside the property-line to ensure fire department access to the open space.

The Preserve boundary adjacent to existing communities begins 10 feet beyond property lines. Therefore in most cases Zone 1 brush management activity will , be accomplished outside of Preserve boundaries. Zone 2 activities are limited to the maximum extent practicable, as determined by the Fire Marshal, in order to reduce encroachment into the Preserve. Zone 3 does not apply to existing communities.

Brush management for the Sunbow II community is accomplished through a Community Facilities District (CFD). In this community the Sunbow SPA Plan dictates specific provisions for brush management. The approved Sunbow II SPA provides for 45 feet of fuel modification. Specifically, the mitigation measures adopted for the project state the following:

Slopes shall be maintained to the extent possible in a natural state in the open space areas. Where grading must occur on slopes adjacent to housing, 30 feet of succulent plant material shall be planted, followed by a decomposed granite trail 15 feet in width to act as a firebreak and planting of native drought tolerant, low fuel plant material farther down the slope. All landscape plans shall be subject to approval by the City Landscape Architect. If manufactured slopes are adjacent to open space areas, these slopes shall be replanted according to the Open Space City Coordinator, Landscape Architect and Fire Marshal standards.

7.4.6 North City PMA Management

The North City PMA includes the project areas for Rolling Hills Ranch and Bella Lago. These are developing communities with associated SPA or Precise Plans. Both projects are Covered Projects pursuant to Section 5.1.1 of this Subarea Plan. The San Miguel Ranch and Inverted "L" properties are also located in this north area of the City. Preserve land associated with these two properties has been, or will be dedicated into the San Diego NWR and will be managed by USFWS.

Conditions of Coverage for Rolling Hills Ranch and Bella Lago are incorporated into Sections 7.5.6.3 and 7.5.6.5, respectively. Short-term management responsibilities required through respective project entitlements are assured through SPA or Precise Plans and grading permit conditions.

Rolling Hills Ranch has completed the project entitlement process. The Rolling Hills Ranch SPA Plan includes MMRP requirements, which must be completed prior to issuance of grading permits. Other Conditions of Coverage required through this Subarea Plan will become conditions of grading permits.

A Precise Plan for Bella Lago is being processed, but has not yet been approved by the City. All Conditions of Coverage for Bella Lago pursuant to this Subarea Plan will be incorporated as conditions of the Bella Lago Precise Plan and to be completed or assured prior to issuance of grading permits.

As a Condition of Coverage for Rolling Hills Ranch and Bella Lago prior to project grading and/or conveyance of land into the Preserve, ASMDs will be prepared. A mechanism for financing long-term Preserve management must also be in place prior to grading. Upon conveyance of land into the Preserve in the North City PMA, the City will assume responsibility for long-term management and monitoring, consistent with the ASMDs. The City Habitat Manager will oversee this responsibility, although a designee may be assigned to perform actual management tasks.

7.4.6.1 Brush Management in the North City PMA

All brush management activity within Bella Lago will be required, as a condition of the Precise Plan, to be conducted outside the Preserve. Brush management in San Miguel Ranch is also required to take place outside of Preserve boundaries.

Bella Lago and San Miguel Ranch will be required to work with the Fire Marshal at the time of Tentative Map application to determine the total area that will be necessary for all Zones 1, 2 and 3 brush management activities. The relative fire hazard of the open space adjacent to structures will be determined by the Fire Marshal based upon slopes and fuel loads (types and extent of vegetation). If the Fire Marshal determines that the fire hazard in the open space area is *high,* and no other measures are undertaken to abate fire hazard, the Fire Marshal *may* require a brush management area up to 150 feet from structures. However, brush management requirements may be reduced (as determined and approved by the Fire Marshal) for projects which provide mitigation acceptable to the Fire Marshal, thus reducing the overall distance needed for brush management.

Rolling Hills Ranch accomplishes brush management through its Homeowner's Association (HOA). The Rolling Hills SPA Plan includes specific provisions relating to brush management, which are summarized below.

Fuel modification within the Rolling Hills Ranch project must be consistent with Section 3.6 of the Rolling Hills Ranch SPA Plan. In addition, Subarea 3 – the eastern-most development area of the project – must accomplish all fuel modification within the development area, pursuant to the following tentative map condition (No. 90):

> *Locate fuel modification areas in Subarea 3 entirely within affected lots. Indicate lot line extensions required to accommodate said areas on the Final Map(s) of Subarea 3, subject to the approval of the City Engineer, Fire Marshal and Director of Planning.*

In responding to potential design modifications required pursuant to the Conditions for East Area Coverage outlined in Section 7.5.6.3 of this Subarea Plan, the developer may request approval by the City for inclusion of the fuel modification area into a separate lot of record owned by or easement granted to a (HOA) for maintenance.

7.4.7 Otay Ranch PMA Management

The Otay Ranch General Development Plan (GDP) requires preparation and adoption of SPA Plans for each Village to be developed within the Otay Ranch. Each Village SPA Plan establishes the requirements for Preserve conveyance, in accordance with the requirements of the Otay Ranch GDP. Short-term management requirements are defined

in the SPA Plan through the MMRP, and are required to be implemented prior to issuance of grading permits.

As land is conveyed into the Preserve, the Otay Ranch POM begins long-term management. Within the City jurisdictional boundaries and this Subarea, the City is responsible to ensure that long-term management is fulfilled consistent with this Subarea Plan. In order to meet this responsibility, the City Habitat Manager will work directly with the Otay Ranch POM.

The Otay Ranch RMP provides a general committee framework for Preserve management oversight. This framework established an Otay Ranch Policy Committee, Executive Committee and Project Team. These three committees have oversight responsibilities for administration of the RMP and management of all Otay Ranch Preserve lands. The committees are constituted as follows:

1. Policy Committee

   The Policy Committee is comprised of the Mayor of the City of Chula Vista and the member of the County Board of Supervisors representing the South Bay Supervisorial District.

2. Executive Committee

   This committee is comprised of the County of San Diego Assistant Chief Executive Officer or his/her designee and the City of Chula Vista Assistant City Manager or his/her designee.

3. Project Team

   The Project Team is comprised of staff from the County of San Diego and the City, as determined by the Executive Committee. The Project Team is responsible to oversee the day-to-day operations associated with Preserve management.

Decisions related to acceptance of offers of Preserve land dedications, establishment of management priorities, allocation of CFD funding service contracting and other operational and management concerns will be made by the Project Team with periodic update reports to the Executive and Policy Committees. Upon approval of this Subarea Plan and issuance of Take Authorization to the City by the Wildlife Agencies, the City will assign the City Habitat Manager to the Otay Ranch Project Team. The City Habitat Manager will represent the City on all matters pertaining to Preserve management. In addition, the Habitat Manager will have authority to set priorities for allocation of PMEF funds (Section 8.0), which may be used only for Preserve enhancement programs within the City and *Chula Vista Subarea*.

Upon approval of this Subarea Plan and issuance of Take Authority to the City by the Wildlife Agencies, the City will also establish an Otay River Valley Stakeholders

committee (Stakeholders Group). The Stakeholders Group will include biologists, representatives from local environmental organizations, landowners who have conveyed land into the Preserve, and landowners with property in the Otay River Valley/Salt Creek area. The Stakeholders Group will meet quarterly with the City Habitat Manager to receive updates on Preserve management activities within the Otay River/Salt Creek area of the Otay Ranch PMA, and will provide input on setting management priorities for this area of the City's Preserve.

7.4.7.1 Brush Management in the Otay Ranch PMA

In the Otay Ranch PMA, all brush management will be outside the Preserve boundaries. All development within the Otay Ranch is subject to the "Otay Ranch GDP Edge Plan Goals, Objectives and Policies." Specifically, a 100-foot edge will be created between development and the Otay Ranch Preserve, within which brush management may occur.

> *Edge Plans' shall be developed for all SPAs that contain areas adjacent to the Preserve. The "edge" of the Preserve is a strip of land 100 feet wide that surrounds the perimeter of the Preserve. It is not a part of the Preserve – it is a privately or publicly owned area included in lots within the urban portion of Otay Ranch immediately adjacent to the Preserve. The edge plan shall be prepared in consultation with a qualified biologist to ensure that proposed land uses will not adversely affect resources within the Preserve. The edge plan shall include a list of plant species that may and may not be used for landscaping within the edge. Fuel modification zones may be incorporated into the edge. Development adjacent to the edge shall be restricted to development types that are least likely to impact specific adjacent biological resources. Landscaping or block walls shall be used in appropriate areas adjacent to the edge to reduce impacts of noise and light. No structures other than fencing and walls shall be allowed and are to be built and landscaped in such a way as to minimize visual impacts on the Preserve and the Otay Valley Regional Park.*

7.5 City Planning Component Framework Management Plan

The Preserve in the City Planning Component includes the existing open space encompassed by the communities of Bonita Long Canyon, Rancho Del Rey, Terra Nova, Sunbow and Eastlake I, and open space that will be dedicated as development occurs in the future communities of Rolling Hills Ranch and Bella Lago. Lands conserved on the southern parcel of San Miguel Ranch within the City are also included in the Preserve. However, these conservation areas have been dedicated to the USFWS SDNWR and will be maintained and managed by USFWS. The Preserve areas in the City Planning Component consist primarily of coastal sage scrub and include known populations of snake cholla, San Diego barrel cactus, Otay tarplant and coastal California gnatcatcher.

This Section of the Chula Vista Subarea Plan constitutes the Framework Management Plan for the City Planning Component of the Preserve. This Framework Mangement Plan will also apply to all properties within the Bonita Planning Component that annex into the City and become part of the City Planning Component.

The management directives listed in this section represent an initial view of the management requirements of the Preserve within the City. It is expected that modifications will be needed over time, based on realities encountered in the field as the Preserve is assembled. Monitoring of selected target species, pursuant to Section 7.4.3 of this Subarea Plan, is expected to show general trends of wildlife use and species preservation, as well as to indicate areas where species management focus is needed.

7.5.1 Litter, Materials Storage, and Illegal Activities

Priority 1:

1. Remove litter and trash on a regular basis; Post signage to prevent and report littering in trail and road access areas; provide and maintain trashcans and bins at trail access points.

2. Impose penalties as applicable for littering, dumping and violations of leash laws. Fines should be sufficient to prevent recurrence, cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and pay for enforcement staff time.

3. Prohibit permanent storage of materials (e.g., and hazardous/toxic chemicals, equipment) within the Preserve and ensure appropriate storage per applicable regulations in any areas that may impact the Preserve, due to potential leakage.

4. Keep wildlife corridor crossings within the Preserve free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.

5. Monitor Preserve areas to prevent illegal activities, such as off-road vehicle use, illegal plant harvesting, etc.

7.5.2 Adjacency Management Issues

Priority 1:

1. Enforce, prevent and remove illegal intrusions into the Preserve on an annual basis, as well as on a complaint basis.

2. Install barriers (fencing, rocks/boulders, appropriate vegetation) and/or signage in new communities where necessary to direct public access to appropriate locations.

3. Require all new development to adhere to the following adjacency guidelines:

   a. *Drainage*:

      1. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the Preserve. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

      2. Develop and implement urban runoff and drainage plans which will create the least impact practicable for all development adjacent to the Preserve. All development projects will be required to meet NPDES standards and incorporate BMP as defined by the City's Standard Urban Storm Mitigation Plan (SUSMP).

      3. Pursuant to the San Diego Regional Water Quality Control Board Municipal Permit, and the City of Chula Vista Storm Water Management Standards Requirements Manual, which includes the SUSMP, all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (as defined in the Municipal Permit and the Local SUSMP) are required to implement site design, source control, and treatment control BMPs. The BMPs shall, at a minimum include:

         - Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat;
         - Conserve natural areas where feasible;
         - Minimize storm water pollutants of concern in runoff;
         - Remove pollutants of concern from urban runoff;
         - Minimize directly connected impervious areas where feasible;
         - Protect slopes and channels from eroding;
         - Include storm drain stenciling and signage;
         - Include additional water quality provisions applicable to individual project categories;
         - Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable; and,
         - Implement BMPs close to pollutant sources.

4. Require all NPDES-regulated projects to implement a combination of BMPs as close to potential pollutant sources as feasible.

b. *Toxic Substances*: All agricultural uses, including animal-keeping activities, and recreational uses that use chemicals or general by-products such as manure, potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate methods on their site to reduce impacts caused by the application and/or drainage of such materials into the Preserve. Methods shall be consistent with requirements of the RWQCB and NPDES standards.

c. *Lighting*: Lighting of all developed areas adjacent to the Preserve should be directed away from the Preserve wherever feasible and consistent with public safety. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration should be given to the use of low-pressure sodium lighting.

d. *Noise*: Uses in or adjacent to the Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy uses or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species, consistent with Table 3-5 of the MSCP Subregional Plan.

Where noise associated with clearing, grading or grubbing will negatively impact an occupied nest for the least Bell's vireo during the breeding season (March 15 to September 15), noise levels should not exceed 60 LEQ. However, on a case-by-case basis, if warranted, a more restrictive standard may be used. If an occupied least Bell's vireo nest is identified in a pre-construction survey, noise reduction techniques, such as temporary noise walls or berms, shall be incorporated into the construction plans to reduce noise levels below 60 LEQ.

Where noise associated with clearing, grubbing or grading will negatively impact, an occupied nest for raptors between January 15 and July 31 or the coastal California gnatcatcher between February 15 and August 15 (during the breeding season), clearing, grubbing or grading activities will be modified if necessary, to prevent noise from negatively impacting the breeding success of the pair. If an occupied raptor or coastal California gnatcatcher nest is identified in a pre-construction survey, noise reduction techniques shall be incorporated into the construction plans.

Outside the bird breeding season(s) no restrictions shall be placed on temporary construction noise.

e. *Invasives*: No invasive non-native plant species shall be introduced into areas immediately adjacent to the Preserve. All open space slopes immediately adjacent to the Preserve should be planted with native species that reflect the adjacent native habitat. The plant list contained in the "Wildland / Urban Interface: Fuel Modification Standards," Appendix L, must be reviewed and utilized to the maximum extent practicable when developing landscaping plans in areas adjacent to the Preserve.

f. *Buffers*: There shall be no requirements for buffers outside the Preserve, except as may be required for Wetlands pursuant to Federal and/or State permits, or by local agency CEQA mitigation conditions. All open space requirements for the Preserve shall be incorporated into the Preserve. Fuel modification zones must be consistent with Section 7.4.4 of this Subarea Plan.

5. Extend the City Preserve Edge Risk Assessment Program to all new areas of the Preserve.

Priority 2:

1. Disseminate educational information to residents and landowners adjacent to and inside the Preserve to heighten environmental awareness of the Preserve's goals and purpose, and inform residents of access, appropriate plantings, construction or disturbance within Preserve boundaries, pet and livestock control, fire management and other adjacency issues. This will also provide educational information about the QCB. For new communities, development of educational materials will be required as part of SPA or Precise Plan approvals, and will be implemented as a Priority 1.

7.5.3 Public Access, Trails and Recreation

Priority 1:

1. Incorporate into the City's Greenbelt Master Plan the following: location of all trails within the Preserve; guidelines for trail construction; and guidelines for design of hiking and equestrian staging areas.

2. Develop all new recreation facilities in or adjacent to the Preserve consistent with the adjacency guidelines found in Section 7.5.2 of this Subarea Plan.

3. Locate trails, view overlooks, and staging areas in the least sensitive areas of the Preserve. Locate trails along the edges of urban land uses adjacent to the Preserve, or the seam between land uses (e.g., agriculture/habitat) and follow existing dirt roads as much as possible (except where occupied by QCB) rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) due to the typically heightened resource sensitivity in those locations.

4. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood crossjoints, edge plantings of native grasses, and mulching of the trail.

5. Minimize trail widths to reduce impacts to critical resources. To the maximum extent practicable, do not locate new trails wider than four feet in core Preserve areas or wildlife corridors. Core areas and wildlife corridors, where new trails will be limited to four feet, will be defined in area-specific management directives. Where trails are planned in concert with sewer or water utility easements, the trail width should consider the easement requirements for the utility. Trails should not be encouraged within SDG&E easements. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.

6. Limit the extent and location of equestrian trails to the less sensitive areas of the Preserve. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300 to 500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values of the Preserve are not impaired.

7. Limit the access to finger canyons through subdivision design, fencing or other appropriate barriers, and signage.

8. Provide sufficient signage to clearly identify public access to the Preserve. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation requirements.

9. Off-road vehicle activity is an incompatible use in the Preserve.

10. Restore areas disturbed by off-road vehicles to native habitat where possible or critical, or allow vegetation to regenerate.

7.5.4 Invasive Exotics Control and Removal

Priority 1:

1. Do not introduce invasive non-native species into the Preserve. Encourage adjacent residents to voluntarily remove invasive exotics from their landscaping.

2. Direct priority funding to the monitoring and removal of invasive non-native plant species within the Preserve consistent with ASMDs and pursuant to specific species requirements outlined in Table 3-5 of the MSCP Subregional Plan.

3. For new communities, see Section 7.5.2, Priority 3(e) of this Subarea Plan.

4. Adopt and implement a SUSMP, pursuant to requirements as a co-permittee of the RWQCB NPDES Permit, to minimize impacts to existing year-round runoff flow within the Preserve to the extent feasible in order to minimize potential invasion from non-native ant species, with specific focus on Salt Creek Canyon.

Priority 2:

1. Provide information on invasive plants and animals harmful to the Preserve, and prevention methods, to Preserve visitors and adjacent residents.

2. Utilize trained volunteers to monitor and remove exotic species as part of the Preserve, neighborhood, community, school or other organizational programs. If done on a volunteer basis, prepare and provide information on methods and timing of removal to staff and to the public if requested.

3. If eucalyptus trees or other non-native trees die or are removed from the Preserve area, and if replaced, use appropriate native species. Ensure that eucalyptus trees do not spread into new areas nor increase substantially in numbers over the years. Eventual replacement by native species is preferred if locations are not being used as raptor nesting sites.

4. Work with the California Department of Agriculture and/or University research specialists to develop an affirmative approach to limit the potential for invasion of non-native ant species into the Preserve.

7.5.5 Flood Control

Priority 1:

1. Perform standard maintenance, such as clearing and dredging of existing flood channels, and cleaning desiltation basins outside the nesting or breeding seasons (March 15 – June 31) of sensitive bird or wildlife species utilizing the riparian habitat. Standard maintenance should be performed to minimize any impacts to habitat, and limited to tasks required to maintain the channel in a state that can adequately carry anticipated water quantities. Standard maintenance activities include repairing erosion damage, removing excess siltation and debris, and repair of damaged fences or channel structures. New drainage channels should be designed to replicate, to the maximum extent possible, natural flows, and to require as little ongoing maintenance as possible. All activities in drainages will be evaluated for conformance with Federal and State wetland permitting regulations. If required by law, Federal (Clean Water Act, Section 404) and/or State (Fish and Game Code Section 1600 *et seq.*) permits will be obtained.

2. Implement the RWQCB NPDES Permit.

7.5.6 Project-specific Management Requirements and/or Conditions for Coverage

The following describes site-specific Preserve management activities that are currently or will be undertaken by developers associated with specific new communities. These Preserve management activities are the project-specific conditions that have either been incorporated into project approvals or will be included as conditions for coverage.

7.5.6.1 Sunbow II

The Sunbow II development project, currently under construction, completed a Section 7 Consultation which was approved by the USFWS in 1995. The Sunbow II parcel has been fully mapped and conservation areas established through the City environmental review and land-use approval process as well as environmental requirements established under the ESA, U.S. Clean Water Act, and California Fish and Game Code. These conservation areas are incorporated into the Preserve. Notwithstanding any provision to the contrary within this Subarea Plan, the Section 7 Consultation Agreement, incorporated herein by reference, shall govern development of the Sunbow II project. The Biological Opinion issued by USFWS includes the following obligations which the Sunbow developers must meet:

1. 19.4 acres of coastal sage scrub habitat is being preserved onsite, and 65.1 acres has been acquired for off-site mitigation in O'Neal Canyon. The 19.4 acres of coastal sage scrub habitat is being included in the Preserve and the 65.1 acres of habitat in O'Neal Canyon is being conserved outside the *Chula Vista MSCP Planning Area* but within the MSCP Subregional Preserve.

2. All graded slopes adjacent to natural open space north of Olympic Parkway are being revegetated with coastal sage scrub to provide a non-exotic species buffer to the preserved habitat.

3. A Community Facilities District (CFD) has been created to fund maintenance of the coastal sage scrub open space in perpetuity. Site-specific management activities within the Sunbow II open space are governed by the existing Section 7 Biological Opinion and include the control of access, trash removal, and as-needed restoration of trails and other disturbed areas. This activity is to be conducted by the CFD and shall not exceed $65,000 over every five-year period.

7.5.6.2 Rancho Del Rey (SPA III)

Biological mitigation for coastal sage scrub (CSS) impacts resulting from development of this nearly completed community was accomplished through the purchase of 360 acres of offsite mitigation land and through an onsite revegetation

program, as part of a 4(d) habitat loss permit. The revegetation program, currently in the monitoring stage, included a transplant program for snake cholla and San Diego barrel cacti. A golden-spined cereus (*Bergerocactus emoryi*) cactus clump was preserved in open space. The following monitoring obligations continue to be conducted by the developer pursuant to the Mitigation Monitoring and Reporting Program (MMRP) for Rancho Del Rey SPA III:

1. Complete a five-year monitoring program for coastal sage scrub revegetation undertaken within the project area.

2. Complete five-years of protocol gnatcatcher surveys as required by the MMRP within the CSS revegetation area and portions of the south leg of Rice Canyon adjacent to the revegetation area.

7.5.6.3 Rolling Hills Ranch (Salt Creek Ranch)

The approved General Development Plan and SPA Plan for Rolling Hills Ranch includes thirteen (13) separate neighborhoods divided into three Subareas. The first Subarea has been completely built out and Subarea 2 is currently under development. As part of the first phase of the project, Rolling Hills Ranch constructed an off-site section of Proctor Valley Road across San Miguel Ranch property resulting in a Take of coastal sage scrub. Mitigation for that Take was accomplished through the preservation of habitat in dedicated open space on San Miguel Ranch.

In July 2001 the developer of Rolling Hills Ranch, Pacific Bay Homes, agreed to terms with the City and the Wildlife Agencies to amend approved plans for Subarea 3 (the eastern-most portion of the approved project) in order to provide for additional habitat and species conservation. The terms provide for implementation of a new plan for Subarea 3, referenced as the "Proposed Alternative" and depicted in Exhibit A (Appendix G). The Proposed Alternative eliminates all development in the area originally approved as Neighborhood 13 in the Rolling Hills Ranch SPA Plan and redesigns Neighborhood 12 in order to expand conservation area along the Subarea's western ridgeline and adds a small development area on the north boundary of Neighborhood 12 that does not impact any narrow endemic plant species. Both Neighborhoods are located along the western ridge of Subarea 3, adjacent to lands owned by the OWD. The redesign of Neighborhoods 12 and 13 will significantly expand the open space connection between Rolling Hills Ranch, the eastern habitat conservation area on OWD land and San Miguel Mountain. The estimated 82.5 acres of the newly conserved ridgeline will ensure preservation of key habitat containing three known QCB locations and a substantial population of variegated dudleya.

Implementation of the Agreement will also provide for enhanced conservation of Otay tarplant. The street located along the western edge of Neighborhood 11 will be moved to the east, and lots 9 through 12 and lot 19 of the approved Tentative

Map will be eliminated in order to increase onsite Otay tarplant preservation by 2.6 acres. The internal open space corridor between Neighborhoods 9 and 10A and Neighborhoods 11 and 12 contains approximately 22.62 acres and will be designated as a TMA. To augment existing Otay tarplant in the TMA, as a provision of the Agreement, topsoil containing Otay tarplant will be moved from development areas in Neighborhood 11 to the graded slopes in the TMA. Because of the location and configuration of the TMA, it will be conserved as onsite open space, but will not be included in the Preserve (Figure 7-2). An Otay tarplant management program will be created to guide habitat management within the TMA and the program will be funded through establishment of a non-wasting endowment, in an amount not to exceed $100,000 to be provided by the developer. In addition, Rolling Hills Ranch will contribute off-site mitigation for Otay tarplant. Off-site mitigation will include preservation of 5.8 acres within the San Miguel Ranch Mitigation Bank containing approximately 15,080 plants and conservation of a separate off-site 10-acre parcel located within the MSCP Subregional Preserve and containing a minimum of 15,000 Otay tarplants. Two locations outside the TMA will also, pursuant to the Agreement, receive special consideration. These two areas, located in the northwest corner of Neighborhood 11 (2.58 acres) and the southwest corner of Neighborhood 12 (2.86 acres) are part of the brush management area located between development and the Preserve. In order to encourage the viability of narrow endemic plant growth in these areas, a modified brush management protocol will be implemented to provide for selective thinning only during appropriate times during the tarplant seasonal cycle (i.e., before the plant emerges).

Overall, an estimated 314.6 acres of upland habitat will be conserved to mitigate for habitat impacts resulting from Rolling Hills Ranch development, consisting of approximately 265.9 acres of habitat conserved onsite combined with approximately 48.7 acres of habitat conserved off-site. Of the 265.9 acres conserved onsite, approximately 214.2 acres are incorporated into the Preserve. These areas include coastal sage scrub, native and non-native grassland and a variety of plant species, including Otay tarplant, variegated dudleya and San Diego goldenstar. The remaining onsite open space (51.7) is not included in the Preserve. The remaining onsite open space that is not included in the Preserve is comprised of two separate TMAs (approximately 5.8 acres and 16.8 acres) and three neutral open areas (totaling approximately 27 acres).

In order to maintain compliance as a Covered Project pursuant to this Plan, Rolling Hills Ranch must meet the obligations of the July 2001 Agreement and the approved SPA Plan, (including the following specified SPA Plan obligations), and any obligations listed below which are not already incorporated into SPA Plan approvals. The following obligations are considered to be conditions of project coverage for Rolling Hills Ranch:

1. Selective (or phased) grading shall be required and enforced, i.e., only areas immediately subject to development should be graded.

2. In the event that a fire or fuel break is deemed necessary, plant species used in this area shall be non-invasive.

3. Native plants in riparian and/or natural areas shall not be trimmed or cleared for aesthetic purposes.

4. Revegetation of cut slopes external and/or adjacent to natural open space shall be accomplished with native plant species which presently occur onsite or are typical for the area.

5. Fencing shall be installed around the natural open space area to prevent impacts to biological resources from domestic pets and human activity. An alternative would be the planting of native barrier plant species that would discourage pedestrian and pet activity into open space areas.

6. Area-specific management directives will be prepared and funding for implementation provided by the developer prior to issuance of a grading permit for any portion of Subarea 3.

7.5.6.4 San Miguel Ranch

A total of approximately 2,038 acres of San Miguel Ranch open space on the north and south parcels will be incorporated into the MSCP Subregional Preserve. This includes conservation of the entire 1,852-acre northern parcel, and approximately 186 acres of the approximately 743-acre southern parcel.

All of the 1,852-acre northern parcel has been or will soon be included in the San Diego NWR, and 1,186 acres of the SDNWR property has been designated as a conservation bank, within which conservation credits may be purchased. Pursuant to project entitlements, 166 acres of the northern parcel, which is direct mitigation for development of the southern parcel, will be added to the SDNWR pursuant to the SMR MSCP Annexation Agreement (Section 2.1.9).

Approximately 557 acres of the 743-acre southern parcel will be developed or remain in open space uses which are not suitable for dedication to the Preserve. Approximately 186 acres of the southern parcel will be incorporated into the Preserve and will also become a part of the San Diego NWR, pursuant to the SMR MSCP Annexation Agreement (as shown on Figure 7-3).

Pursuant to the SMR MSCP Annexation Agreement, the San Diego NWR will monitor, maintain and manage the biological resources on the 352 acres of natural open space which the San Miguel Ranch project is contributing to the Preserve. To assist with biological conservation efforts, San Miguel Ranch prepared a management plan for the Otay tarplant conserved on the southern parcel and a management plan for the other sensitive biological resources on the natural open

space on the southern parcel to be contributed to the Preserve. These plans have been provided to the USFWS and can serve as a resource for the San Diego NWR, as this entity deems appropriate. San Miguel Ranch is also providing $380,000 to assist with management of the MSCP Preserve areas on the southern parcel.

Additional project-specific conditions of coverage are set forth in the SMR MSCP Annexation Agreement, addressing issues such as: (1) revegetation along constructed roadways adjacent to the Preserve and within landscaped areas adjacent to the Preserve; (2) San Diego barrel cactus translocation; and (3) vegetation clearing during the gnatcatcher breeding season. The reader is referred to the SMR MSCP Annexation Agreement itself for more detail.

The Chula Vista MSCP Subarea Plan also prohibits drainage into the Preserve from project-related parking lots adjacent to the Preserve and prohibits the release of potentially toxic or otherwise impactive elements from developed and paved areas and recreational uses that might degrade or harm the natural environment or ecosystem processes within the Preserve.

7.5.6.5 Bella Lago

Bella Lago is a planned residential community consisting of 179.6 gross acres with approximately 93.7 acres of buildable area. Based on new narrow endemic plant surveys for the 18.2-acre southern portion of Bella Lago (former Clarkson and Turner properties), the property owner agreed to terms with the City and the Wildlife Agencies for an onsite Preserve configuration for the entire Bella Lago project area in July 2001. As a result, the project will provide 86.5 acres of onsite open space being included in the Preserve (Figure 7-4). Conserved areas onsite will include coastal sage scrub, non-native grasslands, native grasslands and riparian habitat communities as well as populations of the narrow endemic plant species Otay tarplant and variegated dudleya. In addition, off-site conservation of 14,630 square feet of land containing at least 210 Otay tarplants will be provided within 2.5 acres of acquired land.

As the property is rezoned and a Precise Plan, Tentative Map and environmental documents for compliance with CEQA are prepared, area-specific management directives for the Preserve area will also be prepared and adopted as part of Precise Plan approval. Implementation funding for Preserve management pursuant to the adopted ASMDs must be in place prior to issuance of a grading permit. The Bella Lago MMRP pursuant to CEQA will incorporate the project's area-specific management directives.

7.6 Otay Ranch Planning Component Framework Management Plan (RMP)

A portion of the Otay Ranch Planning Component, 9,100 acres of the 9,449-acre Otay Valley Parcel, is located within the *Chula Vista Subarea.* The portion of the Otay Ranch Preserve located within the *Chula Vista Subarea* consists of the Otay River Valley generally east of Heritage Road and west of the Otay Reservoir and includes the connecting Salt Creek and Wolf Canyon open spaces. This part of the Preserve includes coastal sage scrub, maritime succulent scrub and Wetlands associated with the Otay drainage basin. Species located in this area include coastal California gnatcatcher, coastal cactus wren, California rufous-crowned sparrow, San Diego barrel cactus, Otay Ranch tarplant and snake cholla. The adopted Otay Ranch RMP, constitute the Framework Management Plan for the Otay Ranch Planning Component, consistent with this Subarea Plan.

7.6.1 RMP Management Studies, Plans and Policies

The Otay Ranch RMP is the critical planning document for resource protection on Otay Ranch. The RMP1 provides general biological information and establishes overall Preserve conservation and management goals. The RMP2 provides detailed biological studies, specific plans and programs for habitat management, and a habitat conveyance plan.

The goal of the Otay Ranch RMP is to establish a permanent preserve within Otay Ranch to protect and enhance biological, paleontological, cultural and scenic resources; maintain biological diversity, and promote the survival and recovery of native species and habitats. The RMP1 is a comprehensive plan for the preservation, enhancement and management of sensitive, natural and cultural resources within Otay Ranch. The RMP1 was adopted by the County of San Diego and the City, concurrent with approval of the Otay Ranch GDP/SRP.

The RMP1 provides for establishment of a POM to oversee long-range management activities within the Otay Ranch Preserve. The RMP2 designates responsibility as the POM jointly to the City and County of San Diego. The City and County have entered into a Joint Powers Agreement (dated March 6, 1996) to collectively manage the Preserve for at least five years, after which time they may choose to extend the joint responsibilities or name a third-party POM. The POM may also elect to transfer a portion of the Preserve to the USFWS, and into the San Diego NWR.

The City supports the transfer of Preserve land east of Otay Lakes to the USFWS, provided the following commitments are first met:

1. USFWS agrees to assume all costs associated with management of lands so transferred. Management funding for Preserve lands transferred to USFWS will not be provided through the Otay Ranch CFD;

2. Easements or other equivalent assurances acceptable to the City for trails and infrastructure necessary to allow development contemplated by the Otay Ranch

GDP/SRP and applicable City and/or County General Plans, are provided and recorded as part of the transfer action; and

3. Concurrence by the County of San Diego for the proposed land transfer to the USFWS.

As development occurs in Otay Ranch, habitat is conveyed to the City and the County with an undivided interest. The RMP2 establishes a habitat conveyance schedule, requiring that 1.188 acres of habitat is to be conveyed for each acre of land developed. Habitat conveyances may be made of land located within the Otay Ranch Preserve either inside or outside the City, in accordance with RMP2.

The RMP2 also provides a conveyance forecast by Village; however, it should be emphasized that as SPA Plans are processed, the actual conveyance obligation may vary from the forecast due to more precise planning and engineering and based upon final calculations of total development area. The conveyance forecast projects a total of 6,352 acres of habitat conservation related to that portion of Otay Ranch which is located within the City boundaries and the *Chula Vista Subarea*. Approximately 2,742 acres of the Otay Ranch Preserve will be conserved within the *Chula Vista Subarea*. Thus, it is anticipated that 3,610 acres of the City's habitat contribution from Otay Ranch development and implementation of this Subarea Plan will occur outside the *Chula Vista Subarea* within the County MHPA and the *Chula Vista MSCP Planning Area.*

The RMP1 outlines objectives for identification, preservation and management of biological resources within the Otay Ranch Preserve. These objectives include identification, preservation, enhancement and restoration of sensitive resources. Additionally, policies to achieve these objectives include target preservation goals for species and habitats within Otay Ranch, which were incorporated into the performance standards as a part of the GDP/SRP. These standards provide for minimum habitat conservation levels, identification of specific locations for mitigation contributions, preservation, enhancement and/or restoration, buffers, transplanting, and monitoring and management.

In order to meet these objectives, the RMP2 encompassed a series of management and monitoring tasks that must be performed over time throughout implementation of the Otay Ranch GDP. These tasks include preparation of ranch-wide studies, plans and programs. The completed RMP2 studies provide a database from which RMP plans and programs are prepared. The RMP2 plans and programs involve efforts which require a continuing commitment to implementation. The following provides a list of studies, and plans and programs which were completed and adopted as part of the RMP2 adoption and are appended to the RMP2 and this Subarea Plan:

1. <u>Ranch-wide Phase 2 Studies</u>

    - Coastal California Gnatcatcher and Coastal Cactus Wren Studies
    - Vernal Pool Study

- Wildlife Corridor Study
- Raptor Study
- Resource Identification and Mapping (completed as part of GDP/SRP but not included in RMP2 Appendices)
- Otay Valley Parcel Cultural Resources Study

2. Ranch-wide Phase 2 Plans and Programs

- Vernal Pool Management Plan
- Range Management Plan
- Coastal Sage Scrub Master Plan
- Biota Monitoring Program

7.6.2 Conditions of Coverage for the University Project

The University Project located adjacent to the Otay River Valley and Salt Creek, is within the Otay Ranch and incorporated into the Otay Ranch GDP/SRP. As part of Otay Ranch, the RMP and its management studies, plans and policies serve as the Framework Management Plan for the university. In addition, the following are conditions of coverage for the development of the University Site:

1. 20.6 acres of disturbed area within Salt Creek will be restored/enhanced to coastal sage scrub habitat (Figure 3-2). Prior to approval of a grading plan for the university project, a restoration/enhancement plan will be prepared consistent with the guidelines established in the Otay Ranch Coastal Sage Scrub Master Plan.

2. Disturbance of coastal sage scrub within the university development areas on the east side of Salt Creek will be subject to grading restrictions during the coastal California gnatcatcher breeding season;

3. Any temporary impacts from grading that encroach into habitat areas will be restored consistent with the guidelines established in the Otay Ranch RMP;

4. All brush management activities will be conducted within the development areas and will be consistent with the brush management requirements of the Otay Ranch RMP; and,

5. University Road, as depicted on Figure 2 of the February 16, 2000, Draft City of Chula Vista Subarea Plan to traverse Salt Creek and connect the eastern and western University campuses, is no longer included in the University Redesign. Therefore, Take Authorization for University Road is not provided through this Subarea Plan.

7.6.3 Otay River Valley Framework Management Plan

An estimated 2,742 acres of the Otay Ranch Preserve are within the boundaries of the *Chula Vista Subarea* and, as such, will be part of the Preserve. This area is also located

within the Otay Valley Regional Park Concept Plan boundaries. The Concept Plan for the Otay Valley Regional Park has been prepared and provides for a mixture of uses. In addition to active recreation, the Concept Plan allows passive recreational uses, provides for protection of scenic, cultural and environmentally sensitive areas, and encourages compatible agriculture.

Much of the Otay River Valley within the City has been extensively mined for sand and aggregate materials, and many of these disturbed areas within the Preserve could be revegetated with appropriate wetland habitats. Additional areas, generally on river terraces long used for agricultural purposes, could be revegetated with various upland habitat types.

Active recreational uses planned for the Otay River Valley are discussed in Section 6.3.4 of this Subarea Plan. Active recreation development areas are identified in the Draft OVRP Concept Plan and this Subarea Plan. These areas are not a part of the Preserve. All active recreational uses within the Preserve must be consistent with the goals and policies of the Otay Ranch RMP, in particular Section 6.2 which establishes standards and guidelines for development. RMP guidelines require that active recreation areas be located in previously disturbed, non-sensitive areas; that they be readily accessible from existing and planned public roads and not intrude into core Preserve areas; and that they be clustered to minimize the extent of edge between active recreation uses and sensitive resources.

In addition, the following are the Framework Management Plan Preserve management priorities for the OVRP. These priorities will be considered during future park planning efforts, and addressed within the context of the more definitive biological analysis of the current study of the Otay River Valley.

Priority 1:

- Coordinate an invasive non-native plant removal program with the City of San Diego and the County or in conjunction with a regional MSCP management program in order to provide for long-term management of this problem.

- Prepare a Master Revegetation Plan for wetland and upland habitat types, as appropriate. The plan will not include the active recreation areas and will not preclude passive recreation, trails, trailheads/staging areas or other uses identified on the Otay Valley Regional Park Concept Plan or in the land use section of this plan. This Plan may be funded jointly by the three agencies involved in the Otay Valley Regional Park JEPA (Joint Exercise of Powers Agreement) and therefore include the entire Regional Park or may be conducted by the City for only that portion of the Park within its jurisdictional boundaries.

- Maximize the use of existing dirt roads and avoid, to the extent feasible, the construction of new trails and/or roads.

- Construct all recreational facilities consistent with the Preserve adjacency guidelines found in Section 7.5.2 of this Subarea Plan.

- Direct priority funding to the monitoring and removal of invasive non-native plant species in locations specific to species requirements outlined in Table 3-5 of the MSCP Subregional Plan.

- Where funding is available, install barriers for species-specific management pursuant to Table 3-5 of the MSCP Subregional Plan.

- Limit, to the greatest extent possible, public access to the finger canyons which are tributary to Wolf Canyon.

Priority 2:

- The City and Wildlife Agencies shall pursue grants to accomplish the revegetation of appropriate areas in accordance with the Master Revegetation Plan.

- Coordinate with the Otay Valley Regional Park management entity the installation of signage, fences, staging areas/parking lots and other public use facilities.

- Install barriers to deter human intrusion into particularly sensitive areas.